

**ABSTRACT OF THE DISCLOSURE**

The present disclosure relates to a method for communicating and applying adaptive security to a data stream comprising a plurality of data packets. The method comprises the steps of identifying a desired security level range and a desired actual security level which falls within the desired security level range. The availability of a number of security processor operations at the host is determined so that, if needed, computing resources at the host can be reallocated to ensure that the data stream can be verified at the desired actual security level. If there are not sufficient resources available for reallocation at the host, communication resources can be reallocated, for example by changing the bandwidth of the data stream or another incoming data stream. With this method, the actual security level will be kept within the desired security level range.